PETROLEUM REVIEW

Honorary Editor

GEORGE GLASS, O.B.E., M.A.

Editors

JANICE FEARNLEY

JEFFREY SEGAL (*November*)

VOLUME THIRTY-ONE

1977

THE INSTITUTE OF PETROLEUM

61 NEW CAVENDISH STREET

LONDON W1M 8AR

NB: Page numbers no longer run continuously throughout the year. Each monthly issue now starts at page 1.

AUTHOR INDEX

ALGAR, P., Aberdeen and security, December; 50.
ALGAR, P., First words, January; 2, February 1-2.
ALGAR, P., Aberdeen and the impact of oil. December; 25-33.
ALGAR, P., Occasional words, December; 3.
ATKINSON, G., Changes in the petrol retailing movement, March; 7 9. 11.
BUCKMAN, D., Consolidation of platform contractors, April; 21.
COOK, C., Further trials and tribulations, November; 3, 4.
COOPERATIVE WHOLESALE SOCIETY,
Co-op stamps in petrol retailing, March, 13.
CRANFIELD, J., Consolidation of platform contractors, April; 21.
DEVERELL, M. C., North Sea finance and the clearing banks, December; 62, 64.
DUFFY, D., North Sea exploration activity, December; 72-74.
DUFFY, D., North Sea rig locations as at 3.11.77, December; 74-76.
DUFFY, D., North Sea oil and gas statistics, January; 30-34, July; 31-36.
DUFFY, D., Right service in the right place at the right time, December; 35, 36, 38, 40, 42-44.
FFRENCH-MULLEN, T., New concept in cathodic protection for offshore structures, August; 3-5.
GRAY, H., Some thoughts on energy policies, February; 17, 19.
GRIMOND, J., Energy policy in the Liberal party, February; 11, 12.
HADLEY, B., Expro-profile of a UK service company, September; 7, 9.
HALL, M., Methanol as a motor fuel, January; 11, 12.
HAMMITT, D., Minimise control valve problems by selecting the proper packing, November; 9, 11, 12.
HARRISON, G., Methanol as a motor fuel, January; 11, 12.
HELLER, C. A., UN and petroleum in 1976, June; 7, 9.
HINTON, S., Energy-saving in the transport industry, April; 3, 5, 7, 8.
LLOYD, T. Alternative energy systems, January, 7, 9, 10.
MARTIN, P. R., Contracting success but manufacturing problems, October; 11, 12.
MIDLAND OIL REFINERIES, Recovery of used industrial oil, January; 15, 16.
NICHOLSON, R., Aberdeen and transport, December; 46-48.
PARK, J. D., Siberia, the new energy store, February; 3, 4, 6.
ROSS, I. W., Financing aspects of UK offshore hydrocarbon development, December; 55, 56, 58, 60, 61.
STALVIES, C, Offshore risk management, May; 7, 9.
WILSON, G. Oil industry in Scotland, February 13-15.

SUBJECT INDEX

Amoco:
New Iranian field, March, 30
1976 results, April, 31.
Noco Group Valhall development, October, 17; November, 18
Texas Petroleum operating for Amoco in Colombia, February, 23

Analysis
IP standardization committee panel for North Sea oil analysis methods, August, 43
Nuclear magnetic resonance spectrometer, December, 13.
Rapid determination of sulphur in petroleum products, March, 45.
Toxic gas analysers, March, 40

Books and Publications Received
New publications, January, 29; February, 19; March, 42; April, 38; May, 38; June, 26; July, 29; 30; August, 38; September, 35; October, 29, 31; November, 33; December, 81

Books Reviewed:
Fuel economy of the gasoline engine; December, 81

Brazil:
CJB technical assistance for Petrobras, March, 34
Ethylene plant contruction Triunfo, May, 34.
Lockheed Petroleum Services Petrobras contract, March, 35
SNG plant, November, 28

BNOC:
BP exploration, January, 25.
CJB know-how for Petrobras, March, 34
Dept. Energy, BNOC and Union North Sea Group participation, February, 29
Lockheed undersea system for Petrobras, March 35
Marathon rig order, April, 33
Participation agreements, February, 29, 30; March, 36; April, 33; June, 14; July, 24; August, 33; December 11
Thistle field on schedule, December, 4
To operate blocks 14/16 and 14/17, May, 27

BP:
Abandons N.S. well 3/29-2, November, 22
Acquisition in BOC Sub Ocean Services, March, 31
Brazil exploration, January, 25
BP Canada 1976 net income, May, 34
BP Canada first quarter, June, 18
Buchan agreement, August, 29
Completes Norwegian well appraisal, November, 20
Diversifies into mineral fibre insulation, June, 12
Dividend increase refused, July, 22
Enjay/BP interest in block 211/2, April, 25
Exploration offshore Gabon, June, 14
Film wins award, May, 29; December, 7
Income for first quarter, July, 22
Invests in Stolt-Nielsen, September, 19
Magnus successfully appraised, February, 25
Offer for Emerald shares, June, 18
Participation agreement, July, 24
Sea Quest sold to SEDCO, May, 30
Take over of Century Oils Group-stopped, July, 22
Takes share in Licence PL 209, July, 22
Umm Shaif complex, February, 23
Zambia unit, December, 7

Burmah Oil:
LNG tanker financing, April, 32
New Burmah-Castrol labs., July, 21
Seatrain suit against Burmah reaches a settlement, July, 19
Tanker settlement, January, 27
Trading profits, November, 24

Canada:
Canadian bitumen production, April, 26
Canada joins IEA coal project, May, 30
Dunlop technology for Sandisle in Canada, July 23 Fluor feasibility study, August, 31. Mackenzie Delta drilling suspended, July 20

Celtic Sea:
Developments review, July, 3
Drilling programme, August, 27
First offshore production platform jacket loaded out, May 33
Shell UK E & P drilling, January, 25
Texaco drilling activities, January, 25; April, 26

Chemicals:
Charcoal/oil mixes, September, 19

Chevron:
Ninian steady progress, December, 5
Order SBM for Ninian, November, 27
State participation agreement, February, 30

Conferences and Meetings:
Coming Events, January, 29; February, 35; March, 43, 44; April, 39, 40; May, 39; June, 26, 27; July, 30; August, 39; September, 36, 38; October, 28; November, 34; December, 80

Conoco:
Annual report, June, 18
Capital outlay and exploration expenses, March, 31
Chad well result, April, 27
First quarter results, June, 18
North Sea spending in 1977, March, 31; April, 32
Receives safety award, July, 21
Second quarter results, September, 21
Third quarter results, December, 14
Well 211/19-6 discovery, March, 28

Contract News:
Advanced air diving package contract, May, 33
Algerian pipeline contract, December, 20
Badger process plant for BSC, June, 15
Badger to contruct synthetic fuels plant, March, 34
Basrah refinery order for Kent Instruments, June, 17
Bestobell complete LPG insulation contract, May, 33
Brent contract for P & W Offshore, October, 19
BICC contracts for the Ninian field, February, 28
Brown & Root and NPC joint venture for Statfjord B, February, 28
Burgess-Manning wins USSR contract for gas pipleine separators, April, 29
Canadian oil pipeline application, February, 28
Capper-Neill to supply aromatic plant capacity, December, 21
Chloride Transipack for Tartan field, December, 20
Computer control contract for Cormorant, September, 25
CJB hook-up Brent Alpha, November, 27
CJB Offshore hook-up contract, August, 31
CJB technical assistance for Petrobras, March 34
Davy Powergas in USSR contract, July, 23
Davy Powergas & Mitsubishi methanol plant agreement, March, 35
Degremont Laing gets contract for Mobil's Coryton refinery, February, 27
Deltic Automation N.S. contract, August, 32
Duckhams Aldridge depot expansion, September, 25
Dunlop technology for Sandisle in Canada, July, 23
EAE Group completes pallets for Shell, May, 34
Electronic dispensing system for petrol, August, 31
Elliot Turbomachinery Yugoslav contract, January, 26
Ferranti helicopters in English Channel, September, 25
Ferranti wins Thistle platform contract, June, 15
Flotta contract for RJP Nicklin, February, 28
Fluor Canada contract in Canada August, 31
Fluor contract for Korea, January, 26
Fluor gains Marathon refinery contract, June, 15
Fluor gets Abu Dhabi contract, June, 15
Foster Wheeler gets Statoil/Mobil terminal contract, June, 17
Foster Wheeler gets SIBP propylene recovery unit contract, April, 29
Foster Wheeler gets Yugoslav contract, January, 26
Foster Wheeler to construct Kuwait bitumen plant, April, 29
G. C. Davis gas detection equipment for Mobil platforms offshore Nigeria, January, 26
Gardline to survey N.S. ocean bed, September, 25
Grangemouth computer system, October, 19
Grangemouth contract for Laing, June, 15
Harland and Wolff LPG carriers contract, June, 15
Hawker Siddeley Power Transformers for Saudi Arabia, April, 30
Helicopter pipeline surveillance contract, May, 33
Hunting Geology and Geophysics contract in South Yemen, April, 30
Hunting Surveys to position jetting on Heather-Ninian link, May, 33
Hymatic valves for Russian gas pipeline, June, 17
Inspection service contract for BIX, December, 20
Isopad heating for Canadian pipelines, November, 27
Jiskoot Auto-control metering and prover station for North Sea oil, June, 17
Jiskoot automatic samplers for BP Alaska project, May, 33
Jiskoot custody transfer system, December, 20
Joint venture NIOC and Shell in Iran, July, 23
Kenting UK gets BP contract to drill onshore, May, 31
Laing and Texas Eastern combine for N.S. gas venture, February, 28
Laing/SIAC to build Irish gas pipeline, May 31
Lloyd's Register certifying authority award, March 28
Lockheed Petroleum Services Petrobras contract, March, 35
Maintenance in Argyll field, April, 29; September, 25
Marconi entertainment systems contract, March, 34
Matthew Hall Eng. gets Murchison platform design contract, January, 26
McDermott gets Murchison platform contract, August, 30
Mobil Coryton refinery survey, July, 24
NEC Gas wins Irish contract, April, 30
Ninian steel platform, September, 25
North Sea contract for British Steel, June, 15
Norwegian Trench studies commissioned, August, 31
Oy Strömberg supplies electrical equipment for rig in Caspian Sea, March, 34
Pakantil gains Nigerian consultancy, November, 27
Permutit—Boby filtration for Murchison platform, November, 28
Petrocarbon contract for Bulgaria, January, 26
Petrocarbon to supply natural gas liquefaction plant, Isle of Grain, January, 26
Pipeline control systems, November, 25
Polyethylene plant Bamble Norway, May, 31
Plessey wins contracts in Ireland, March, 35
Procon coal gasification design, November, 25
Protech Internat., secures Libyan pipeline contract, April, 30
Pullman Kellogg awarded EPA contract, July, 23
Pullman Kellogg fluid catalytic cracker for Nigeria, July, 23
Pump order for Murchison field, October, 19
Radiography contract aboard Semac 1, May, 33
Review, October, 11
Sandisle Structures for Canada, July, 23
SEDCO contract with Phillips Norway, May, 31
Shetland Towage orders three tugs, March, 35
Sigmund Pulsometer Pumps for Portuguese oil terminal, April, 29
Sigmund Pulsometer Pumps for Kuwait May, 34
South American contract for Wimpey Labs; May, 31
South Wales Switchgear gets subcontract for Kuwait, April, 30
Spectra Tek UK flow measurement contract—Sullom Voe, April, 29
Star Canopus conversion, December, 20
Stone & Websters gets polypropylene plant contract, April, 30
Straits of Magellan pipeline contract, March, 34
Snamprogetti (ENI) refinery contract in Germany, March, 35
Strongwork Diving wins Argyll maintenance contract, April, 29
SNG plant in Brazil, November, 28
Sullom Voe construction contracts, April, 29; August, 31; September, 25; December, 20, 21
Sullom Voe—oil boom contracts, November, 25
Sulzer flash gas compressors for Cormorant platform, November, 28
Syncroset electric valve actuators, November, 28
Tartan field contracts, November, 22, 25
Tartan field gas turbines, October, 19
Technip contract for ethylene plant in Brazil, May, 34
Technip turn-key contract Qatar project, July, 24
Thistle contract for Expro, July, 24
Turkiye Petrolleri contract for Badger, February, 27
Underwater cathodic protection survey,

September, 23
Unit Automation lube oil units for ARAMCO, January, 26
UK hoists for Statfjord, A, April, 29
Weir pumps for Saudi Arabia, March, 34
Whessoe gets heat exchanger contract for Texas ethylene plant, July, 23.
Wilson Walton contract for Beryl "A" accommodation increase, June, 17
Worley Internat., gets contract for Luhaio oil field development in Iraq, February, 28
Yugoslav contract for Davy Powergas, October, 19
Yugoslav pipeline contract, November, 27

Corrosion:
Cathodic protection for Murchison platform, December, 21
Conferences & meetings, February, 35; April, 39
Riser pipeline inspections, October, 23
Shieldcote corrosion resistant coatings August, 34
Sinter coat E—fluidised bed anti-corrosion coating, November, 30

Diving:
Comex world record dive, December, 6
Conferences & meetings, March, 43; November, 34
Diagnostic system for decompressing divers, September, 31
Divers' taxation problems, June, 11; September, 21
Dive-timer unit, March, 40
Emergency transfer system, September, 31
Guidance notes on safe diving, February, 29

Drillships:
New drillship launched, DS-471, June, 12

Energy:
Alternative energy, January, 7, 9, 10; August, 33, 34
Coal Industry Bill, October, 23
Coal—powered car, December, 18
Conferences & meetings, January, 29; February, 35; April, 39; May, 39; July, 30; October, 33
Conservation, June, 20; August, 27; September, 19; November, 29; December, 11, 17
Consumption statistics, July, 25; November, 29
Efficient use of automotive fuels, January, 17-20, 22, 23
Energy Act, February, 30; June, 19
Energy Commission established, August, 33; December, 10
EEC Energy Council, August, 34
Freight transport energy savings, October, 23
Geologists' new professional body, November, 22
Geothermal energy, January, 13, 14
Growth in energy consumption, March, 39; June, 20
Liberal Party energy policy, February, 11, 12
Lucas electric vehicles, December, 17
Methanol as a motor fuel, January, 11, 12
Nuclear installation safety, October, 24
Petroleum consumption, March, 39; April, 3, 12
Petroleum products UK consumption, April 12
Recovery of used industrial oil, January, 15, 16
R & D in energy conservation, August, 27
Short-term energy forecasts, December, 10
Tidal energy, August, 33
Transport industry saving, April, 3
UK energy statistics 1977, September, 29; November, 29; December, 9
United Nations and petroleum, June, 7
Watt committee on Energy, May, 19
Wind energy report, August, 33
Wind power, project, August, 34
Working Group—Energy Strategy, December, 9
Workshop on Alternative Energy Strategies, July, 7

Esso:
Drilling west of Shetlands, September, 19; December, 4
Esso Plus Motor Oil, January, 25
Half-year results, December, 14
Monograde oil, January, 25
Papua New Guinea Venture, November, 18
Royal Society Esso Award 1978, December, 84
Shell and Esso agree principles of majority state participation, February, 29; March, 36

Ethylene:
Shell/Essochem ethylene agreement, October, 19

Exploration:
Argentine oil and gas find, July, 20
Block 11/30 third well test results, April, 26
British Gas resumes Irish Sea exploration, June, 9
BP takes share in licence PL 209, July, 22
BP to explore offshore Gabon, June, 14
By Hudson's Bay, March, 32
Celtic Sea, January, 25; April, 26
Colombia, April, 27
Dept. of Energy South Western Aproaches drilling programme, August, 34
Egypt, August, 28
Electrical logger, September, 31
Fulmar field, August, 27
Gamma ra July eolrgg, 26
Guatemala politics and oil, August, 6
Irish Shell commences drilling, June, 11
Kuwait geological study, August, 31
Magnus well successful appraisal, February, 25
Mesa confirms Moray Firth well, February, 25
Minor oil flow west of Shetland, December, 4
Nat West exploration loan, March, 32
North Sea review, December, 72
Offshore Brazil, January, 25
Offshore Sicily, October, 17
Onshore, March, 30; May, 31; July, 21; July, 25
Production licences—fifth round, April, 33
Sirte Basin, Libya, August, 29
Sleipner test well results, August, 28
South Western Approaches, August, 34
Statistics—oil and gas, January, 30; July, 31
Successful ninth well on Thistle block, March, 28
Sun Oil block 211/22-1 discontinues drilling, February, 25
Texaco confirmation Gulf of Mexico, February, 23
Texaco new find in UK North Sea, September, 19
Transworld appraisal well for Buchan field, March, 28
US drilling increase, December, 6
West of Shetland Isles, September, 19; December, 4

Egypt:
Agip agreement in Sinai Peninsula, June, 11
Lockheed oil recovery devices, June, 17
Oil and gas exploration, August, 28

Films:
Appointment at Penha, December, 17
Assen, December, 17
BP films win award, May, 29; December, 5
Castrol films, December, 17
End of the road, May, 29; December, 7
Energy in perspective, December, 7

Finance:
Acquisition of Nordic Oil Services, September, 23
Alaska Marine Terminal Revenue Bonds, August, 30
Ampol Petroleum debenture issue, April, 31
Anaconda—now subsidiary of Atlantic Richfield, March, 33
Amoco 1976 earnings, April, 31
Ashland buys into Thistle, June, 9
Ashland buys Thistle crude production, July, 19
Ashland 9 months' earnings, September, 21
Basic Resources Internat. forms new company with Elf Aquitaine, July, 20
Basic Resources Internat. public issue, September, 23
Basic Resources Internat. raises $1.8m, April, 31
BEA Petroleum Ltd. formation, July, 20
BP acquires 25% in BOC Sub Ocean Services, March, 31
BP Canada first quarter results, June, 18
BP Canada increases 1976 net income, May, 34
BP dividend increase refused, July, 22
BP offer for Emerald shares, June, 18
Burmah LNG tanker financing, April, 32
Burmah tanker settlement, January, 27
Burmah trading profits, November, 24
Canadian Superior Oil 1976 results, April, 32
Century Oil take over by BP is stopped, July, 22
City of Valdez Marine Terminal Revenue Bonds, October, 18
Charterhall increase in North Sea oil

interests, January, 27; March, 31
City Deposit Brokers oil division, May, 30
Cluff Oil, March, 3
Cluff Oil—new issue, October, 18
Corco—new financial arrangements, August, 30
Conoco results—loss, August, 29; November, 24
Commercial Metals—new oil trading dept., February, 23
Community loans for hydrocarbons projects, February, 29
CFP 1976 results, August, 29
CFP half year results, October, 18
Conoco first quarter results, June, 18
Conoco North Sea 1976 results, April, 32
Conoco second quarter results, September, 21
Conoco spending plans, March, 31
Conoco third quarter results, December, 14
Deminex gets Barclays loan, August, 30
Dept. of Industry grants, September, 29
Divers taxes and Inland Revenue, June 11; September, 21
Euro-currency financing, May, 25
ECGD guarantees loan for US petrochemical plant, June, 18
EDC/Bank of Montreal loan, March,32
ENI five months earnings, October, 18
ERDA finance refining research, May, 34
Esso half-year profit, December, 14
European bulk average prices, January, 39; February, 6; March, 44; May, 18 June, 27
European Investment Bank projects, February, 26
Financing UK offshore oil development December, 55, 62, 65
Fluor 9 months' earnings, November, 24
Foster Wheeler, 6 months' results, October, 18
Gulf acquires Chevron Oil A.G., August, 29
Gulf Canada 6 month results, October, 18
Gulf—Kewanee merger, October, 18
Gulf Oil acquires 30% of Lorco, July, 22
Hudson's Bay Indonesian offshore interest, February, 26
Hudson's Bay Oil and Gas acquires interest in block offshore Newfoundland, January, 27
Hudson's Bay Oil and Gas first quarter results, June, 19
Hudson's Bay Oil and Gas first half, September, 21
Hudson's Bay Oil and Gas nine months' results, December, 15
Hudson's Bay $70m on oil and gas exploration, March, 32
Hunting Oilfield Services acquires Drill-Tech, June, 12
Increase in paraffin retail price, March, 36
Internat. Energy Bank 1976 profits, April, 31
Investment study in North Sea E & P, February, 25
Lasmo and Scot join forces, January, 27
Leasing—alternative source of finance, June, 3
Lloyds British Testing merger with Casco, November, 24
Lorneterm LNG, May, 31; September, 21
McKee re-structure, November, 24
Mainwork Ltd, acquired by David Brown-Vosper, December, 14
Managing the 'multinationals', August, 21
Marathon first quarter results, June, 19
Marathon first six months' results, September, 21
Marathon preliminary 1976 results, March, 32
Marathon 1976 results, April, 32
Marathon nine months' results, December, 14
Murphy Oil first quarter results, June, 18
Murphy Oil second quarter results, September, 21
Murphy Oil third quarter results, December, 15
Nat West Bank £28m loan, March, 32
Norsk Hydro yearly turnover, October, 18
Occidental call for redemption, July, 22
Occidental's first half results, September, 21
Occidental's first quarter results, June, 19
Occidental sells Belgian refinery interest, June, 14
Occidental's third quarter results, December, 14
Oil Exploration (Holdings) six months' sales, November, 24
Paktank acquires Dorward Terminals, February, 27
Paktank acquires Westwego Terminal, New Orleans, March, 31
Paktank sale of $30 million notes, September, 23
Pan Ocean acquires Frontier Resources, February, 26
Pauley, Petroleum 9 month results, October, 18
Petrofina Canada first quarter results, July, 22
Petrofina 1976 profit, March, 32
Phillips 1976 earnings rise, April, 32
Premier Consolidated six months results, February, 26
Premier Consolidated gets Ball & Collins, April, 31
Press and Imodco form new company, April, 27
Retailing petroleum, March 7, 13, 15, 23
Revenue from North Sea oil and gas, March, 36
Risk management, May, 7
Santa Fe buys into Viking Jersey, November, 24
Shell second quarter results, September, 23
Shell third quarter results, December, 14
Standard Oil (Indiana) first quarter results, June, 18
Standard Oil second quarter results, September, 23
Standard Oil (Indiana) second quarter results, September, 23
Standard Oil (Indiana) third quarter results, December, 15
Standard Oil (Ohio) third quarter results, December, 14
Standard Oil files registration Statement, August, 29
TDC Innovator Award, March, 31
Texaco dividend reinvestment, February, 27
Texaco first quarter results, June, 18
Texas Eastern financing with Royal Bank of Canada, May, 34
Total buys majority in Photon Power Inc., March, 33
Total buys US refinery, October, 18
Transocean third quarter, October, 18
Tricentrol's first half results, November, 24
Tricentrol's first quarter, August, 29
Tricentrol increases US gas prices, April, 26
Tricentrol raises more equity capital, April, 32
Turkish petrochemical plant loan, August, 30
UK loan for Portuguese aromatics expansion, February, 26
UK oil and gas royalties, April, 35
Unitank acquires 50% Tees Storage Co; July, 22
Yugoslav refinery finance, January, 27

France:
CFP half year results, October, 48
Total buys majority in Photon Power Inc., March 33

Gulf:
Acquires Chevron Oil A.G., August, 29
Acquires 30% of Lorco, July, 22
Gulf Canada 6 months' results, October, 18
Gulf/Kewanee merger, October, 18
Suspends Mackenzie Delta drilling, July, 20

Howard Doris:
Personnel accommodated aboard TEV Rangetira, June, 14
Platform construction, October, 9
Readers letter reply, November, 5

Indonesia:
Handil oil field new facilities, June, 12
Signs $50 million Eurodollar loan, September, 23

Institute of Petroleum:
Additions to library, November, 36; December, 86
Annual conference, August, 39, 42; September, 11; October, 33; November 35
Annual dinner, April, 49; October, 33
Annual Dinner 1978, October, 33; November, 35; December, 84
Annual General Meeting, May, 18; June, 28; August, 42
Atmospheric Conservation Committee, May, 43, 44
Classification of hazardous areas—working group, July, 41
Conferences, January, 35, 36; March, 47; April, 51, 52; June 29, 30; July, 30, 42, 43, 44; August, 39, 42; October, 35; December, 84
Council appointment, December, 84
Eastlake Medal, June, 28

Education Committee Report, September, 41
Energy conservation committee, May, 19, 42, 43
Energy economics seminar, March, 47; April, 52, 54; October, 33; December, 85
Engineering Committee Annual Report, July, 38
Engineering sub-committee reports—summary, July, 38
Exploration and Production Committee, August, 42
Guide to North Sea oil and gas technology conference, July, 30; August, 39, 42; September, 11; October, 33; November, 35
Inst. Mech. Engrs. conf. oil-immersed brakes and clutches, July, 42
Joint meeting IP Standardization Committee and API/ASTN delegation, January, 35, 36
Members—new, January, 39; February, 37; March, 49; April, 53; June, 33; July, 44, 45; August, 46, 47, 48; September, 43; November, 35, 36; December, 89
Microbiology meeting, March, 47; April, 51; July, 43
Obituary—J. C. B. Edwardes, March, 48
Offshore Europe '77, February, 35; August, 39
Oil and Water Industries—working group, July, 41
Oil Industry and microbial ecosystems meeting, April, 51; June, 29; July, 43; August, 39, 42
Performance testing of hydraulic fluids symposium, June, 29; July, 44; August, 42
Physical methods of microbial control in oils and coolants meeting, April, 51
Practical application of electro-technology in the petroleum and petrochemical industries, March, 47
Precautionary Labelling Committee, May, 42
President Elect—Mr. D. G. Milne, August, 41
Presidential Address, November, 38
Re-elected President—Mr. H. B. Greenborough, August, 41
Rolling contact fatique performance testing of lubricants symposium, June, 30; July, 42
Safety, Health and Environment Liaison Committee Report, September, 43
Safety news, No. 14, March, 51; No. 15, May, 45; No. 16, July, 46; No. 17, September, 46; No. 18, November, 42
SPE European offshore petroleum conference and exhibition, July, 30
Standardization Committee Panel for N.S. Oil Analysis methods, August, 43
Standardization Committee News, December, 85
Standardization Committee Plans for 1977, June, 31
Standardization Committee Report 1976, June, 29
Vice-Presidents, September, 41
Watt Committee Energy Report, October, 33

Institute of Petroleum Branches:
Aberdeen, August, 42; December, 53
Annual General Meeting, Humber Branch, February, 46
Appointments, January, 36
Edinburgh and South-East Scotland, January, 36
Honorary Secretaries, October, 35
Humber, October, 35
London, November, 35; 84
Meetings, January, 36, 37, 39; February, 46; March, 48; April, 52, 53; May, 18; October, 35; December, 84
Northern, October, 35
South-Eastern, October, 37
Southern, October, 37
South Wales, October, 39; December, 84
Yorkshire, January, 36, 39; October, 39

Institute of Petroleum Branch Meetings:
BNOC as Lord Kearton sees it, December, 88
Changing shape of the oil industry Northern Branch, January, 37
Heat insulation, Northern Branch, April, 52
Protection of offshore energy resources; some security and defence aspects, Edinburgh & East Scotland Branch, January 36
Safety at LPG installations, April, 52, Northern Branch

Institute of Petroleum Publications
IP Code of Practice for calibrating process analysers, December, 87
IP 77-001, February, 37; April, 51
IP 77-002, April, 51
IP 77-003, December, 87
IP 77-004, December, 87
IP 77-005, December, 87
IP 77-006, December, 88
Comparative study of the shear stability of poly methyl acrylates, December, 88
Microbial corrosion affecting the petroleum industry, February, 37, April, 51
Microbiology of soils contaminated with petroleum hydrocarbons Part 2. The natural rehabilitation and reclamation of soils affected, April, 51
Oil degradation and microbiological changes in soils deliberately contaminated with petroleum hydrocarbons, December, 87
Oil pollution analysis for water laboratories, December, 87

Ireland:
British Gas resumes exploration in Irish Sea, June, 9
Conferences & meetings, April, 39
Deminex plugs and abandons well in Porcupine Trough, November, 22
Shell/Agip plugs well in Porcupine Trough, December, 5
Irish gas pipeline contract, May, 31
Offshore developments, July, 3
Plessey wins contracts for Neptune 7, March, 35

Italy:
ENI five months' earnings, October, 18
ENI-Sonatrach to supply LNG to Italy, March, 30
Italian—Algerian gas project, December, 7
Offshore Sicily drilling, October, 17

Japan:
Aga field starts operation, February, 24

Kuwait:
Bitumen plant, April, 29
Geological study contract, August, 31
Sigmund Pulsometer Pumps at LPG complex, May, 34
South Wales Switchgear sub-contract, April, 30

Legislation:
Coal Industry Bill, October, 23
Collisions at sea, September, 30
Compulsory oil stocks, July, 25
Continental Shelf boundaries, September, 27
Energy Act second commencement order, February, 30
Energy Act final commencement order, June, 19
Flammable liquids and gasses revision, July, 25
Gas flaring and pipeline authorisations, February, 30
Health & Safety at Work Act, October, 24
International Liability Convention for offshore oil pollution, February, 28
IMCO limitation of liability convention for maritime claims adopted, April, 35
Mineral Exploration and Investment Grants Acts, September, 29
Offshore safety zone, August, 34; October, 23
Participation agreements, February, 29, 30; March, 36; April, 33; June, 14; July, 24; August, 33; December, 11
Petroleum Engineering Division established, June, 20
Petroleum Stocks Order 1976, February, 30
Prevention of Oil Pollution Act—exemptions, September, 29
Statutory Instrument 1977 No. 500, September, 27
Submarine Pipeline (Inspectors etc.) Regulations, July, 24
Valuation and Rating Order for oil and gas fields, September, 30

Libya:
Sirte Basin discoveries, August, 29
Topco decision reached in Libya, May, 30; November, 20

Lubrication:
Esso Plus Motor Oil, January, 25
Engine oil for extreme conditions, June, 22
Engine oils—new from Esso, June, 22
Engine test beds for lubricants, November, 28
MPX dual purpose oil, August, 35
Monograde oil, January, 25
New range of cutting oils, June, 21
Review of lubricants, November, 15
Tribology Gold Medal, November, 20

Marathon:
Contract offshore Netherlands Antilles, February, 23
Financial results 1976, April, 32

First quarter results, June, 19
First six months' results, September, 21
New jumbo 300-85 offshore drilling rig, May, 29
Nine months' results, December, 15
Preliminary 1976 results, March, 31

Meters:
Calibration prover, June, 21
Fuel consumption meter, December, 13
Fuel grade monitor, August, 35
Gas detection, December, 12
Jiskoot Auto-control metering and prover station for North Sea Oil, June, 17
Metrifloro Calculator, August, 35

Middle East:
Natural gas processing Abu Dhabi-Fluor contract, June, 15
Petrochemical investment, March, 30

Mobil:
Buys in to licence P239, June, 9
Cutting fluids—new range, June, 21
Donation to Heriot-Watt University, February, 24
Production increase from Beryl A, April, 25
Sir Nevil Macready, December, 6
State participation agreements, March, 36
Suspend Mackenzie Delta drilling, July, 20

Nigeria:
Fluid catalytic cracker contract awarded to Pullman Kellog, July, 22
Niger Delta oilfield discovery, March, 30
Pollution convention amendments acceptance, March, 39

North Sea:
Argyll maintenance contract, April, 29; September, 25
Beryl accommodation contract, June, 17
Brent shut-in, August, 28; September, 27
BSC North Sea contract, June, 15
Bruce Oil Management Game, May, 40; August, 24; December, 84
Ekofisk Bravo resume production, August, 28
Exploration activity, December, 72
Financing aspects of UK offshore oil development, December, 55, 62, 65
Flow measurement—Sullom Voe contract, April, 29
Frigg gas agreement, September, 29
Investment study in North Sea exploration and production, February, 25
Helicopter, Industry, March, 25; May, 33
Highland Fabricators steel platform for Ninian, September, 25
Jiskoot Auto-control metering and prover station, June, 17
Murchison design contract, January, 26
Ninian contract for BICC, February, 28
Offshore safety zone, August, 34
Oil production, August, 33; October, 23; November, 29; December, 9
Political party politics and North Sea oil, February, 9, 11, 12, 13-15, 17, 19,
Professor Odell consultant to Dept. of Energy, December, 9
R & D programme, August, 33
Rig locations, December, 74
Statistics—oil and gas, January, 30; July, 31
Thistle contract for Ferranti, June, 15
UK hoists for Statfjord A, April, 29

North Sea Dutch Waters:
Rig locations, December, 76
Underwater inspection contract, December, 21

North Sea Fields:
Argyll, March, 36; April, 29; September, 25; November, 22
Beatrice, October, 17
Beryl, April, 25
Brent, February, 24; August, 28; September, 27; October, 19; November,27
Buchan, March, 28
Claymore, May, 3
Cormorant, February, 24; September, 25
Forties, February, 25; December, 6
Frigg, September, 29
Fulmar, August, 27
General statistical reviews, January, 30; July, 31
Heather, February. 29
Magnus, February, 25
Murchison, January, 26; March, 28; August, 27; October, 19; November, 28; December, 21
Ninian, February, 28; April, 33; July, 19; September, 25; December, 5
Piper, February, 25; May, 3; September, 21; October, 17
Statfjord, March, 27; April, 26, 29
Tartan, October, 17; October, 19; November, 3, 22, 25
Thistle, February, 26; March, 28; June, 9, 15; July, 19, 24; December, 4
Valhall, October, 17

North Sea Norwegian Waters:
BP completes Norwegian well appraisal, November, 20
Frigg gas agreement, September, 29
Gardline to survey seabed debris, September, 25
Hudson Bay buys stake in Block 15/3, November, 22
Rig locations, December, 76
Texaco production licence, March, 27
Valhall field development, October, 17; November, 18

North Sea UK Waters
Argyll well 30/24-8 test, November, 22
BNOC Thistle contract for Expro, July, 24
Brae field wells plugged, June, 9; December, 4
BP abandons well 3/29-2, November, 22
BSC oil well casing and tubing contract June, 15
Continental Shelf Act Report, December, 9
European Investment Bank loan for Thistle development, February, 26
Ferranti communications for Thistle field, June, 15
Forties field agreement, December, 6
Mobil buys into licence P239, June, 9
Moray Firth well confirmation, February, 25
Oil production, August, 33; October, 23; November, 29; December, 9
Pan Ocean abandons Brae field well 16/7-7, June, 9
Phillips confirms Block 16/17, September, 21
Production licences—fifth round, April, 33
Rig locations, December, 74
State participation agreement, February, 29, 30; March, 36; April, 33
Technical details of 99 North Sea wells, April, 35
Texaco discovery in Block 15/23, September, 19
Well 211/12-7 abandoned, December, 4
Well 211/19-6 oil discovery, March, 28

Norway:
Government policy, April, 19
Norsk Hydro yearly turnover, October, 18
Offshore development and production, April, 15
Platform contractor's consolidation, April, 21
Sotra crude oil terminal, June, 17

Occidental:
Columbian exploration and exploitation, April, 27
Compensation-Venezuelan Government, April, 27
Financial results, June, 19; September, 21 December, 14
First half results, September, 21
First quarter results, June, 19
Libyan wells flow, August, 29
Piper platform second flare boom, October, 17
Redemption call, July, 22
SAFCO agreement in Saudi Arabia, November, 20
Sells Belgian refinery interest, June, 14
Third quarter results, December, 14

Offshore Technology:
Anti-corrosion coating system, February, 31
Bobbin valve for killing blow-outs, February, 31
Cathodic protection, June, 23; August, 3
CIRIA information group, February, 29; June, 19
Christchurch Bay tower, November, 25
Conferences & Meetings, January, 29; February, 35; March, 43; April, 39; May, 39; June, 26; July, 30; September, 15, 36; October, 28, 29; November, 34; December, 80
Down-hole cementing, March, 39
Dynamic positioning for Star Canopus, November, 27
Fire protection system, November, 30
Fire training centre, December, 6
Fluid loss reducer for drilling muds, October, 25
Halcrow, Ewbank and Associates—new certifying authorities for offshore installations, February, 30
Lloyds Register appraisal of Bombay High platforms, February, 24
Low power gas detection alarm system, June, 23
Materials for construction, June, 22; July, 9
Oil skimmers, June, 21
Marathon 300-85 Class drilling rig, May,

28
Marine information and advisory service, June, 12
Mud processing unit, June, 22
Niobond anodes, June, 23
ODECO receives OTC award, May, 30
OTC 1977, May, 11, 39
Offshore Europe 77, September, 15
Platform construction, October, 9; November, 3
Rescue bath, December, 12
Ringlift crane, July, 26
Safe-load indicator for offshore cranes, June, 21
Sigma anti-corrosive paint systems, March, 39
Surveying techniques, June, 21
Technical details of 99 North Sea wells drilled, April, 35
Total to study Bombay High, May, 30
UV fire detection system, March, 39
Underwater welding research, March, 34
Vibration analysis techniques, February, 25
Vibratory screen machine for drilling fluids, October, 25
Water injection—offshore Abu Dhabi, February, 23
Well control chokes, June, 23

Pan Ocean:
Abandons Brae field well 16/7-7, June, 9
Acquisition of Frontier Resources, February, 26
Brae field well 16/7-9 plugged, December, 4
Joint venture with Nedlloyd, November, 24

Personnel Changes:
Personnel movements, January, 28; February, 33, 34; March, 41, 42; April, 35, 37, 38; May, 37, 38; June, 24, 25; July, 27, 28; August, 35, 36, 38; September, 33, 35; October, 26, 27; November, 31, 32; December, 23

Petrochemicals:
Computer programmes, December, 12
Conferences & meetings, April, 39; August, 39
ECGD guarantees loan for Corpus Christi petrochemical plant, June, 18
French olef ins plant, August, 31
Middle East & North African petrochemical investment, March, 30
Turkish plant loan, August, 30
UK monthly and cumulative deliveries into inland consumption of petroleum products, April, 12; July, 18; August, 25; September, 18; October, 12; December, 70
UOP providing process technology for USSR, March, 28

Phillips:
Confirms oil in Block 16/17, September, 21
Contract with SEDCO, May, 31
Development and production offshore Norway, April, 15
Nigerian oil discovery, March, 30
Rise in 1976 earnings, April, 32

Pipelay Barges:
Solus Schall inspection team for Semac 1, June, 17

Pipelines:
Adria pipeline project, November, 27
Algerian pipeline contract, December, 20
Australian pipeline standards, December, 68
BSC Hartlepool plant, April, 30
Canadian gas pipeline, November, 20
Canadian oil pipeline application, February, 28
Chelyabinsk USSR gas pipeline, April, 29
Computerised pipework analysis, November, 30
Computerised wall thickness inspection, December, 12
Conferences and meetings, February, 35; April, 39; August, 39; September, 36; October, 28; November, 34
Contract in Straits of Magellan, March, 34
Control system for gas pipeline, November, 25
Cormorant pipeline—planning and laying, February, 20-22
Dutch natural gas pipeline contract, June, 17
Gas-gathering study, June. 14
Gas recovery system for Piper field, September, 21
Guatemalan pipeline, March, 35
Helicopter pipeline surveillance, May, 33
Hymatic Valves for Russian gas pipeline, June, 17
Irish gas pipeline contract, May, 31
Isopad heating for Canadian pipelines, November, 27
Legislation, July, 24
Libyan pipeline project, April, 30
Mainline pipeline system extension, June, 15
Nippon Kokan pipeline contract, September, 25
Pipeline status reviews, January, 32; July, 34
Protective pipe-lining, May, 37
Straits of Magellan, March, 34
Underwater pipeline survey contract, November, 28
Valve actuators for Iranian pipelines, November, 28

Platforms and rigs:
Accommodation increase for Beryl A, June, 17
BP sells Sea Quest to SEDCO, May, 30
Bombay High platform appraisal, February, 24
Concrete in platforms, July, 9, 10
Condeep, April, 23
Construction, October, 9; November, 3
Dunlin platform, July, 10
First jacket loaded-out for Celtic Sea, May, 33
Gas platform module, December, 21
Intercom alarm network, October, 25
Life saving appliances on offshore installations, June, 20
Marathon new jumbo 300-85 Class offshore drilling rig, May, 29
Ninian production platform positioned, July, 19
Norwegian platform contractor's consolidation, April, 21
Open-steel flooring for platforms, March, 40
Platform status reviews, January, 32; July, 35
Shell-Esso platforms—completion in Norway, February, 25
Structural integrity examination, February, 25
Tension leg platform marketing agreement, July, 21
Thistle platform completion, July, 18

Pollution:
Conferences and meetings, July, 30; August, 39
International Liability Convention for compensation for oil pollution victims, February, 29
Lead levels in motor spirit, May, 41
Lockheed oil skimmer, June, 21
Mesa report, September, 29
Nigerian acceptance of 1969 Pollution Amendments, March, 39
Oil dispersant—Fleetex BD/3, May, 37
Oil dispersant, spraying equipment, February, 31
"Oil Killer" absorbent powder, August, 34
Oil spill booms, August, 34; November 25
Oil spill mops, October, 24
Oil spill skimmers, June, 21; August, 35
Pneumatic control for pollution monitoring unit, February, 31
Portable oil dispersion unit, September, 31
Skimovex coalescer/filter, March, 40
Sulphur in automotive and industrial fuels, May, 41

Pumps:
Sigmund Pulsometer Pumps, April, 29; May, 34
Weir Pumps for Ghawar field, March, 34

Queen's Award:
Expro, June, 14
Foster Wheeler, June, 14
Hunting Surveys and Consultants, June, 14
Johnson Matthey Research Centre, June, 14
Land & Marine Engineering, June, 14
Marconi International Marine, June, 14
Marconi Instruments, June, 14
Marconi Space and Defence Systems, June, 14
Sir William Halcrow & Partners, June, 14

Readers Letters:
Fluorine content, December, 78
Howard Doris reply, November, 5
L. Illingworth, December, 78
C. Z. Marczewski, December, 78
Steam turbine manufacture, December, 78
J. N. Wilson, December, 78

Refineries:
Aliaga, Western Turkey, February, 26
Basrah refinery, June, 17
Castellon de la Plana expansion, February, 28
Compulsory oil stocks, July, 25
Coryton refinery water treatment plant, February, 27
Cracking unit in Pembroke—Milford

Haven, August, 28
Eniag Ingoldstadt refinery contract, March, 35
Fertilizer from refinery waste, April, 11
Ipras refinery expansion, Turkey, February, 27
Jubail—Saudi Arabia, August, 27
Marathon's Garyville refinery expansion, June, 15
Matthew Hall Eng. alkylation plant for BP, October, 19
Methanol plant construction, March, 35
Murphy Oil Louisiana refinery expansion, August, 32
Nigg Point refinery project, July, 19
Occidental sells Belgian refinery interest, June, 14
Port Clarence refinery, Middlesbrough, June, 15
Porto refinery, February, 26
Refinery sludge disposal, April, 11
Self-cleaning sight glass, May, 35
Shell Chemicals UK olefins project, January, 25; November, 25
Shell hydrocarbons solvents plant, November, 20
Shell Nederland Chemie Moerdijk expansion, January, 25
Shell staff cuts, November, 18
Stanlow refinery, November, 20
SIBP propylene recovery unit, April, 29
Sioak—Yugoslavia refinery, January, 26
Sulphur monitors, September, 31
Total buys APCO's refinery, October, 18
Triunfo refinery, May, 34

Retailing Petroleum:
Argentine petrol monopoly ends, July, 19
BP Code of Practice for retailers, December, 18
Changes, March, 7
Co-op stamps in retailing, March, 13
Gilbarco 'Highline' pump, July, 9
Halving petrol consumption, December, 17
Image changing in the world of petroleum marketing, March, 23
National outlets survey 1976, March, 15
Receipt-printer for self service stations, December, 19
Review, October, 15
Stirling engine, December, 17
Suppliers of petrol to UK market, March, 17
UK deliveries into consumption, April, 12; July, 18; August, 25; September, 18; October, 12; December, 70

Reviews:
Aberdeen and the impact of oil, December, 25
BW Mud—company profile, July, 17
Cluff Oil, March, 3
Computerised North Sea oil, November, 7
Contracting, October, 11
Control valve packing, November, 9
Expro—UK service company, September, 7
Guatemala politics and oil, August, 6
Health and Safety, October, 13
Lubricants, November, 14
Managing the "multinationals", August, 21
1977 guide to independent bulk storage in UK, August, 11
Offshore Supplies Office, September, 9
Oil diary, April, 43; August, 26
Retailing petroleum, March, 7, 13, 15, 23; October, 15
Thomson Organisation, May, 3

Safety:
Ambi-Cat safety flooring for platforms, March, 40
Ansul skid-mounted fire protection system, November, 30
Automatic life jacket, December, 13
Brake fluid vapour lock tester, July, 26
Conferences and meetings, April, 39; June, 26; September, 38; December, 80
Conoco receives safety award, July, 21
Diesel engines for hazardous areas, October, 25
Draft standards for life saving appliances on offshore rigs, June, 20
Fatal accidents in fuel industries, September, 27
Fire resistant hydraulic fluid, October, 25
Flammable liquids and gases legislation, July, 25
Government—safety talks with UKOOA, June, 19
Guidance notes on safe diving, February, 29
Hazardous installations draft, September, 30
Health & Safety at Work Act, October, 24
Health & Safety Commission, December, 7
Health screening centre, December, 6
Hypothermia bath, February, 31
Intercom alarm network, October, 25
IP Safety News No. 14, March, 51; No. 15, May, 45; No. 16, July, 46; No. 17; September, 46; No. 18, November, 42
IMCO safety proposals for tankers, July, 25
"Light water" extinguishers, March, 39
Norwester survival suits, March, 40
Nuclear installation safety, October, 24
Offshore fire training centre, December, 6
Offshore safety zone, August, 34; October, 23
Portable fire pump, December, 12
Proposed safety regulations approved, April, 35
Review—health and safety, October, 11
Rescue bath, December, 12
Safety Representatives Code of Practice, September, 27
Safety vessel for Forties field, December, 6
SIRA safety advisory service, April, 27
Sea survival capsule, July, 26
Toxic gas analysers, March, 40
UV fire-detection system, March, 39
University of Salford advisory service on safety, May, 29

Saudi Arabia:
Aramco Seawater Supply Project, January, 26
Aramco Zuluf expansion, March, 31
Bitumen plant, April, 29
NKK signs agreement with Petroserv, March, 32
Power transformers for Aramco, April, 30
Pumps for Ghawar field, March, 34
Refinery construction, August, 27
SAFCO agreement with Occidental, November, 20

Service Bases:
Aberdeen, December, 25, 35, 46, 50
Aberdeen hotel and restaurant guide, December, 52
Ocean Inchcape new Shetland support base, September, 23
Security, December, 50
Service companies, September, 7; December, 35
Transport, December, 46

Shell:
Celtic Sea drilling, January, 25
Chad well result, April, 27
Irish Shell commences Irish drilling, June, 11
Joint venture with NIOC in Iran, July, 23
Nederland Chemie Moerdijk expansion, January, 25
Olefins project, January, 25; November, 25
Pallets for Cormorant A completed by EAE, May, 34
Second quarter results, September, 23
Shell and Esso agree principles of majority state participation, February, 29; March, 30
Shell Expro pays Peterhead local inquiry expenses, June, 11
Staff cuts, November, 18
Stanlow solvents plant, November, 20
Third quarter results, December, 14

Spain:
Castellon de la Plana refinery expansion, February, 28

Standards:
Adoption of Celsius, February, 39
Australian pipeline standards, December, 68
B.S. 3158, October, 23
B.S. 5387, January, 29
B.S.5440, March, 42
Draft regulations for life saving appliances on offshore installations, June, 20
Hose equipment, October, 23
IP standardization committee panel for North Sea oil analysis methods, August, 43
IP standard methods re-approval, December, 85
IP 226/77, February, 39
IP 336/77T, March, 46
Rapid determination of sulphur in petroleum products, March, 45
Viscosity and viscosity index, February, 39

Storage:
Additional gas storage facilities in Netherlands, February, 23
Bulk storage guide, August, 11
Concrete use in underground storage, July, 13
Jiskoot automatic samplers for stored oil, November, 25

Millwall oil depot, December, 7
Petroleum storage fees, August, 28
Portable system to remove air pollutants, May, 35
Sullom Voe contract, August, 31
Terrastore, July, 13
Underground storage, July, 13

Tankers:
Aluminium spherical tank for LNG tanker, February, 24
Burmah LNG tanker financing, April, 32
Cargo distribution calculator, September, 30
Concrete LNG carriers, April, 27; July, 15
Harland and Wolff to build two LPG carriers, June, 15
IMCO tanker safety proposals, July, 25
LNG Aquarius, July, 20
LNG containment system, November, 18
Spray nozzle equipment, May, 35
S.S. Lima, July, 20
Tanker charter number two for Statfjord, April, 26

Tank Vehicles:
Barrier locks for tankers, October, 24

Terminals:
Crude oil terminal Sotra near Bergen, June, 17
Flotta terminal, February, 28
Sullom Voe construction contracts, April, 29; August, 31; September, 25; December, 20, 21
Sullom Voe, "construction" village, December, 20
Sullom Voe—oil booms, November, 25
Terminal status reviews, January, 32; July, 34
Unitank acquires 50% Tees Storage Co, July, 22
Unitank acquires Leith terminal, July, 20

Texaco:
Acquisition in Atlantic OCS, March, 30
Celtic Sea drilling, January, 25
Dividend reinvestment plan, February, 27
First quarter results, June, 18
Gulf of Mexico discovery, February, 23
New find in Block 15/23, September, 19
Nine months' results, December, 15
Production licence in Norwegian North Sea, March, 27
State participation agreement, March, 36; April, 33; December, 11
Tartan field development, October, 17; November, 3, 22
Topco decision reached in Libya, May, 30; November, 20

Training:
Conferences and meetings, July, 30
Foreign languages for engineers, April, 41
Grants for training drillers, August, 28
Heriot-Watt Univ. petroleum engineering course, September, 13
Offshore fire training centre, December, 6
Part-time B.Sc. in Chem. Eng., August, 27
Petroleum Industry Training Board, April, 41; August, 28; December, 6
Robert Gordon's survival training facilities, June, 20

Transocean:
Third quarter results, October, 18

Tricentrol:
First half results, November, 24
First quarter results, August, 29
General review, January, 5-6
Increase in US gas prices, April, 26
Raises more equity capital, April, 32
Sale of interest in blocks 15/21 and 204/30, March, 33

Turkey:
Ethylene plant at Aliaga, Western Turkey, February, 26
Petkim Petrokimya, February, 26

Underwater Technology:
Angus 002, November, 18
Conferences and meetings, July, 30
CIRIA information group, February, 29
Crochet Hook Burial Tool, July, 21
Deep touring vehicle, June, 22
Hybrid underwater camera, May, 35
Komatsu Robot, November, 30
Marfix underwater detection system, May, 35
Pipeline survey contract, November, 28
TOM 300—tethered observation and manipulation vehicle, May, 35
Underwater welding research, March, 34
Vickers high efficiency trenching device, July, 21
WASP submersible, August, 35

United Kingdom:
Retailing petroleum, March, 7, 13, 15, 23; October, 15
Suppliers of petrol to UK retail market, March, 17

USSR
Economic development in Comecon, February, 3
Hymatic valves for gas pipeline, June, 17

Venezuela:
Petroless de Venezuela UK and US offices, May, 34

Vickers Offshore:
Award for trenching device, July, 21

XEROX